

Human Immunodeficiency Virus (HIV) Infection and Acquired Immunodeficiency Syndrome (AIDS)

Agent: Human Immunodeficiency Virus (retrovirus)

Mode of Transmission: Person-to-person via unprotected intercourse, contact of cut or abraded skin with body secretions carrying the virus, use of contaminated needles, blood transfusions and transplants with organs from infected donors, or from mother to child before or during birth or through breastfeeding.

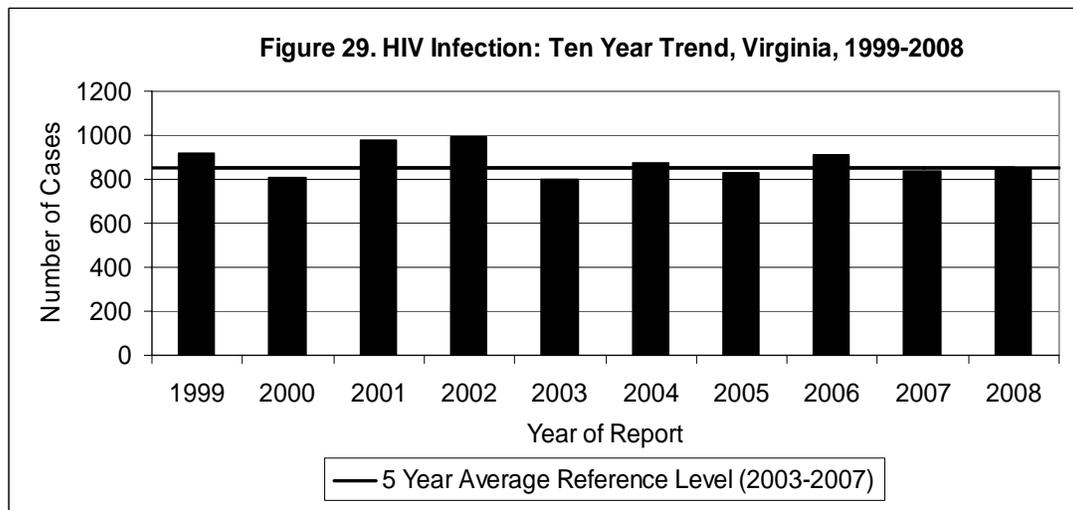
Signs/Symptoms: Initial infection with HIV can cause an acute illness of fever, muscle pain, and sore throat, after which the person can be asymptomatic for several years. Eventually the immune system is affected, causing AIDS.

Prevention: Safer sexual practices; screening of blood and plasma; and among infected mothers, antiretroviral prophylaxis, cesarean delivery before labor, and avoidance of breastfeeding.

Other Important Information: Rapid tests (which provide results within 30 minutes) are becoming more widely available and are used at various testing sites in Virginia. For more information, see: <http://www.cdc.gov/mmwr/preview/mmwrhtml/mm5524a2.htm>, call your local health department or contact the Virginia Department of Health HIV/STD/Viral Hepatitis Hotline at 1-800-533-4148.

HIV

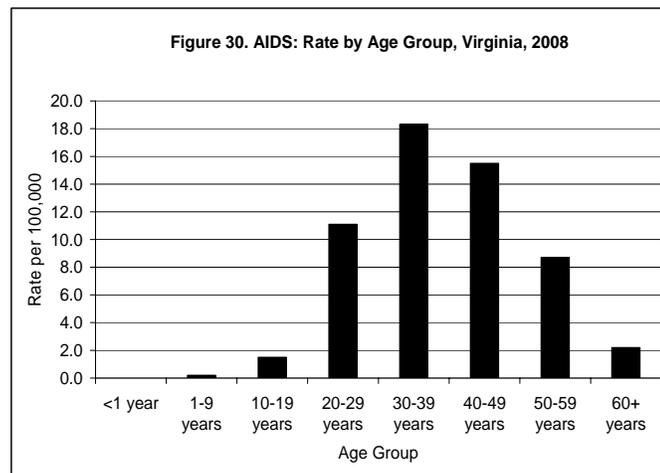
During 2008, 844 cases of HIV infection were reported in Virginia. This represents a slight increase from the 836 cases reported in 2007, but is very similar to the five year average of 851.0 cases per year (Figure 29).



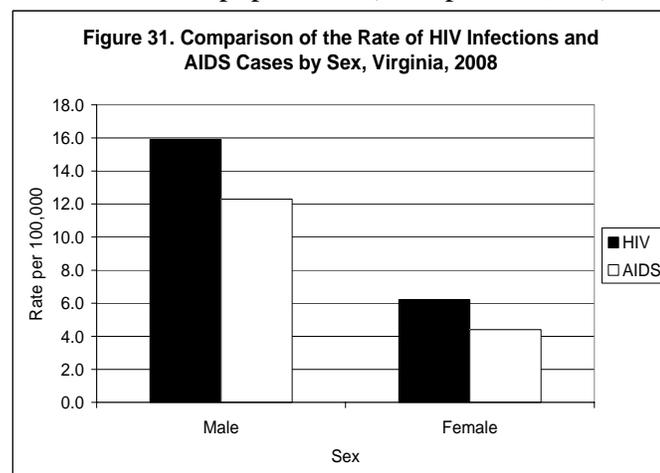
The highest HIV infection rates were in the 20-29 and 30-39 year age groups (24.0 and 19.7 per 100,000, respectively), followed by the 40-49 year age group (16.0 per 100,000). HIV diagnoses were reported in four infants in 2008. The incidence rate in the black population (36.5 per 100,000) was ten times the rate in the white population (3.5 per 100,000), and more than twice the rate in the “other” population (15.8 per 100,000). Incidence rates among males have been consistently higher than rates among females. In 2008, males were twice as likely to be reported with HIV infection as females (15.9 and 6.2 per 100,000, respectively). Despite these disparities, HIV/AIDS rates among black males in Virginia and the U.S. have declined substantially since the early 1990s. In 2008, the eastern, central and northern regions reported the highest incidence rates (17.5, 17.1 and 9.7 per 100,000, respectively).

AIDS

Prior to 1996, approximately 50% of those infected with HIV developed AIDS within 10 years; however, this interval increased with the introduction of anti-retroviral medications. In Virginia, the annual number of reported AIDS cases decreased steadily from 970 cases in 2001 to 589 cases in 2006; in 2007, there was a slight increase to 599 reported cases. The 638 cases reported in 2008 is a 6% increase from the previous year, but is less than the five year average of 676.2 cases per year. The highest incidence rates in 2008 were observed in the 30-39 year age group (18.3 per 100,000), followed by the 40-49 year age group (15.5 per 100,000) (Figure 30). No infants were reported with AIDS during 2008.



Similar to what has been observed for HIV, there are discrepancies in AIDS incidence by race and sex. The AIDS incidence rate in the black population (25.0 per 100,000) was eight times the rate in the white population (3.0 per 100,000), and nearly twice the rate in the “other” population (16.3 per 100,000). AIDS incidence in males was almost three times the rate in females (12.3 and 4.4 per 100,000, respectively) (Figure 31). In 2008, the central region had the highest incidence rate (14.9 per 100,000), followed by the northern region (9.0 per 100,000).



Men having sex with men (MSM) was the most common mode of transmission for AIDS and accounted for 38% of Virginia's cases in 2008. Among cases attributed to MSM, 63% were 25-39 years of age, and 50% were from the black population. Heterosexual contact was the mode of transmission for 17% of all AIDS cases, and 3% were attributed to intravenous drug use (Figure 32).

